

REMARKS

Favorable reconsideration is respectfully requested.

The claims are 1-30.

Claim Rejections

1. Claims 1-17 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Mitsunaga (JPO Website Machine English Translation of JP 2001-323149) in view of Dick (U.S. 4,722,955) and Hiraishi (U.S. 2003/0156238 which is a direct English translation of WO 2002/0099474 A1).

Claims 18-30 have also been rejected under 35 U.S.C. 103(a) as being unpatentable over Mitsunaga (JPO Website Machine English Translation of JP 2001-323149) in view of Dick (U.S. 4,722,955).

These rejections are respectfully traversed.

Reply

The present claims are directed to a direct backlight type liquid crystal device of surprising brightness. The light diffusion sheet of such device is formed from a composition containing less than 0.001 parts by weight of hindered phenol compound based on 100 parts by weight of aromatic polycarbonate resin and polymeric fine particles.

The deleterious effect of hindered phenols on brightness is disclosed, for example, at page 30, lines 12 to 30 of the present specification.

Mitsunaga fails to teach the use of less than 0.001 parts by weight of a hindered phenol as noted by the rejection, however, this deficiency said to be overcome by Dick.

(1) Mitsunaga and Dick

The rejection states that Dick teaches that the presence of a hindered phenol does not necessarily provide the color stability in certain environments and is optional, thus recognizing

that there are instances where a hindered phenol compound is omitted for the purpose of providing the desired color stability in hot and humid environments.

(i) In reply, Dick does not motivate the art-skilled to use little or no phenolic compounds while the present claims expressly recite the use of little or no phenolic compounds in an effort to obtain and improve brightness.

The rejection relies on Dick's teaching in col. 1, lines 23 to 30 that:

...hindered phenolic compounds can be employed with organo-phosphorous compounds in an attempt to enhance both the molecular weight stability and color stability of carbonate polymers. Unfortunately, the color stability of such compositions is not as great as would be desirable, especially when the carbonate polymer is subjected to warm and moist conditions.

Thus, Dick is not teaching away from the use of hindered phenolic compounds, particularly in the presently claimed context.

Dick specifies hindered phenolic compounds as an optional compound in claim 1.

Dick also says "Representative hindered phenolic compounds which are useful herein" (column 3, lines 12-13). Thus hindered phenolic compounds are useful in the invention of Dick while the present claims require little or no such phenolic compounds.

(ii) Brightness: The color stability mentioned in Dick is different from the brightness of the present invention. The color stability of Dick is with respect to yellowness (see column 4, lines 28-33 and TABLE 1). The present specification describes both brightness and yellowness. As discussed in the response of April 10, 2008, the brightness is improved in the present invention.

Brightness is influenced by two factors i.e. brightness is lowered by a decrease in the amount of transmitted light caused by light absorption within the light diffusion sheet. Further, brightness is also lowered by yellowing of the light diffusion sheet (see page 2, lines 17-29 of the present specification).

Accordingly Dick is silent about brightness and its connection with hindered phenols. Thus, there is no motivation to combine Dick with Mitsunaga for any reason and certainly not to increase brightness.

(2) Mitsunaga and Hiraishi

One of the most important characteristics of light diffusion sheets used in a liquid crystal backlight application is brightness (page 2, lines 17-19 of present specification). Both Mitsunaga and Hiraishi fail to disclose or suggest this concept. Thus, there is no motivation to combine Mitsunaga and Hiraishi to arrive at the present invention.

(3) Mitsunaga, Dick and Hiraishi

From the foregoing, it apparent that there is nothing in the combined reference teachings which would motivate the art-skilled to employ little or no hindered phenolic compounds in the present context to employ a direct backlight type liquid crystal device of improved brightness.

Accordingly, the rejections on prior art are untenable and should be withdrawn.

An Information Disclosure Statement accompanies.

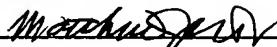
No further issues remaining, allowance of this application is respectfully requested.

If the Examiner has any comments or proposals for expediting prosecution, please contact undersigned at the telephone number below.

Respectfully submitted,

Isao SOGO et al.

By:


Matthew M. Jacob
Registration No. 25,154
Attorney for Applicants

MJ/vah
Washington, D.C. 20006-1021
Telephone (202) 721-8200
Facsimile (202) 721-8250
October 15, 2008